

**Joint MPH Program**

**University of Gondar and Addis Continental institute of Public Health**

**KAP OF HEALTH PROFESSIONALS ON HIV POST-EXPOSURE PROPHYLAXIS**

**USE IN ADDIS ABABA AT FIVE GOVERNMENT HOSPITALS**

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## **Abbreviations**

AIDS -	Acquire Immunodeficiency Syndrome
ART-	Anti Retroviral Treatment
CSA-	Central Statistical Agency
EDHS-	Ethiopian Demographic Health Survey
FHAPCO	Federal HIV/AIDS Prevention and Control Office
FMOH	Federal Ministry of Health
HCW-	Health Care Workers
HIV-	Human Immunodeficiency Virus
IDU-	Injection drug users
KAP-	Knowledge, attitude and practice
MOH-	Minster of Health
PEP-	Post Exposure Prophylaxis
UNAIDS-	Joint United Nations Program on HIV/AIDS
USA-	United States of America
UOG-	University of Gondar

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## **Abstract:**

**Background:-**Healthcare workers are at risk of being infected with the human immunodeficiency virus (HIV). Even if the risk of acquiring HIV due to needle stick injury and body fluid exposure is low (0.3%), it can create in health care facilities fear and insecurity, which can adversely impact patient care. HIV PEP plays an important role in preventing occupational exposure to HIV infection by 81%.

**Objective:-**To assess the KAP of HIV Post Exposure Prophylaxis use among health professionals of Government Hospitals in Addis Ababa

**Methods:-**A cross-sectional study was carried out among 396 health professionals working in Addis Ababa at five government Hospitals. Population proportion sampling was used to select the required study samples from each profession. Quantitative data collection methods were applied. Pre tests were conducted and structured self administered questionnaire was used to collect the data. Percentage, frequencies and composite score index was computed using SPSS version 17 for windows.

**Result:-**Three hundred ninety six health professionals participated in the study and response rate of 93.6%. Among a total of 396 health professionals, only 23.87 % had good knowledge, 59.51% had fair knowledge, the rest 16.92% had poor knowledge about HIV PEP. Three hundred thirty eight (87.79%) of respondents were willing to take PEP service from their respective hospitals. On the other hand, 12.20% are not willing due to their belief that PEP is not helpful to prevent HIV infection and for fear of the service confidentiality system. In addition, only 67.45% were preferred to take the service from their respective health facility. About 67.27 % of health professionals utilized HIV PEP treatment. Nineteen( 54.28%) utilized HIV PEP after exposed to needle stick injury, Among 37 HIV PEP users 13.5% didn't complete the regime due to the drug side effect.

**Conclusion and Recommendation: -** From the study it can be concluded that, Knowledge of health professionals about HIV PEP were inadequate. Thus, standard and on going awareness creation strategy has to be designed and effort has to be made to establish appropriate confidential PEP service within the hospitals.

## **1. Introduction**

### **1.1. Background**

HIV and AIDS pandemic is a global concern and it remains a global health problem of extraordinary dimension. HIV has already caused an estimated 40 million deaths worldwide and has generated profound demography changes in the most heavily affected countries. The impacts of the diseases are very felt in Africa. Particularly Sub-Saharan Africa remains the region most heavily affected by HIV, accounting for 67% of all people living with HIV and for 75% of AIDS deaths in 2007(1).

Ethiopia is one of African countries highly affected by this pandemic and the third highest number of infection in Africa (2). As AIDS in Ethiopia report, the cumulative number of people living with HIV/AIDS is about 1.2 million (41% male and 59% female). This results in a prevalence rate of 2.4% (2.9% among males and 1.9% among females, 7.7% urban and 1. 0.9% rural areas) for the total estimated population of 80 million (3).

The primary mode of HIV transmission in Ethiopia is heterosexual contact (4). Workers in health care facilities are exposed to HIV infection because of needle stick injury and body fluids contamination; nearly 1 million healthcare workers suffer needle stick injuries each year (5). As a result, hundreds of workers are infected with diseases such as Hepatitis B, Hepatitis C and HIV.

Even if the risk of acquiring HIV due to needle stick injury and body fluid exposure is low (0.3%), it can create in health care facilities enormous fear and insecurity , which can adversely impact patient care (5). This problem has been felt in Ethiopia

Post Exposure Prophylaxis (PEP) is any prophylactic treatment started immediately after exposure to a pathogen (such as a disease-causing virus). In the case of HIV infection, Post-Exposure Prophylaxis is a course of antiretroviral drugs which is thought to reduce the risk of seroconversion after events with high risk of exposure to HIV (5).

While there is compelling data to suggest that PEP after HIV exposure is effective, there have been cases where it has failed (6). Failure has often been attributed to the delay in receiving treatment, the level of exposure (i.e., the viral load received), or both. However, for non-occupational exposures, the time and level of exposure are based on patient-supplied information; absolute data is therefore unavailable. PEP can also slow down the development of antibodies, potentially causing false negatives on a later HIV test. Doctors will advise patients who received PEP to get a test at 6 months post-exposure as well as the standard 3 month test (6).

Since the KAP of health professionals in Ethiopian is not adequately studied and Addis Ababa, the Capital city, has the highest number of health professionals and health facilities comparing with other regions, assessing their KAP of health professionals on PEP is fundamental.

## **1.2 Rationale of the study**

HIV replicates within dendrite cells of the skin and mucosa before spreading through lymphatic vessels and developing into a systemic infection. This delay in systemic spread leaves a “window of opportunity” for PEP using antiretroviral drugs designed to block replication of HIV (7). Each day, thousands of people around the world experience accidental exposure to blood and other body fluids or tissues while performing their work duties. Health care workers are especially exposed.

Therefore, in order to further reduce the risk of infection and improve the health care atmosphere and reduce stigma, HIV PEP treatment guideline developed by WHO/ILO and recommended to use in the workplace (5). Ethiopia also adopted this guideline in July 2004(8).

Increasingly, however, health care providers have been raising questions about certain aspects of the use of HIV PEP like issues relating to prescribing protocols and clinical management. In addition to these areas of uncertainty an attitudinal and practical issue raised and has led to calls for need of investigating the sound understanding of health professionals KAP on PEP. The KAP of health professionals on HIV PEP is as multidimensional on individual's community and the society at large effect.

Therefore, the purpose of this study is to fill this pressing problem or gap by examining the KAP of health professionals in Addis Ababa public hospitals. Further, the study will contribute for formulation better HIV PEP service policy in hospital setting and will serve as a benchmark for further study.

## **2. Literature Review**

### **Magnitude of HIV Post Exposure Prophylaxis**

Occupational exposure to human immunodeficiency virus (HIV) in health care facility is low however a potential risk for HIV infection. The prescription of antiretroviral therapy as Post Exposure Prophylaxis following significant potential exposure to HIV has now become routine and it is important that individuals with potential risk of exposure are aware of the procedures to follow and where their first point of contact should be if an incident occurs (12).

### **Knowledge of HIV Post Exposure Prophylaxis**

A survey done on anaesthetist's workers in a large teaching hospital in the UK on ignorance of Post Exposure Prophylaxis Guidelines Following HIV Needle sticks, the survey found that less than half of all respondents were able to identify high risk body fluids. Almost all respondents were able to identify who to contact in the case of a needle stick injury. Only 15% knew that treatment should begin within one hour of exposure (6).

Similar study in Kenya declared that more than half of the health workers (55%) who had operational knowledge of PEP but did not seek PEP following to potential exposure, the major reason were lack of information and fear (9).

A study conducted in Malaysia to measure the level of awareness amongst HCW (doctors and nurses) working in hospital Sungai Petani regarding the Post Exposure Prophylaxis in case of needle stick injuries from confirmed or suspected cases of HIV showed nineteen doctors (56%) and 13 nurses (25%) were aware of correct risk of transmission.

Further more, only 6 doctors (17%) and 8 nurses (15%) knew the correct duration of Post Exposure Prophylaxis. Twenty-three doctors (67%) and 35 nurses (67%) knew that the drugs were available in hospital pharmacy. On the average about 50% of doctors and nurses have fair knowledge of Post Exposure Prophylaxis against HIV (10).

Similar study survey was conducted in Bangalore India on 90 physicians to assess over all knowledge of the physician regarding Post Exposure Prophylaxis .The result of the survey was confirmed awareness of the Physician regarding to occupational risk of HIV infection and Post Exposure Prophylaxis was not up to the mark (11).

A study of knowledge and experience of junior doctors in England in 1998 on Post Exposure Prophylaxis for human immunodeficiency virus found that only 76% of respondents were aware that PEP reduced chance of transmission of HIV post exposure and less than half were able to name one Post Exposure Prophylaxis drug.

The study was conducted in London on Post-exposure prophylaxis for human immunodeficiency virus: knowledge and experience of junior doctors revealed that doctors had an inadequate knowledge of Post Exposure Prophylaxis drugs, even though most had been in contact with infectious materials at some point in their careers (12).

Study was conducted in Ethiopia specifically in Jimma Zone; in this study also the researcher found that 83.9% of the study participants had inadequate knowledge about Post Exposure Prophylaxis HIV risks exposure 13).

The other study was conducted in Ethiopia on assessment of KAP and factors associated with Post Exposure Prophylaxis service utilization among health professionals in Bahir Dar town, Northwest Ethiopia revealed that 112 (41.8%) health professionals had good knowledge, 105 (39.2%) had fair knowledge and the rest 51 (19%) had poor knowledge about Post Exposure Prophylaxis (14).

In addition , other survey in Sir Lankan in Anuradhapura hospital was conducted among hundred doctors to assess the knowledge , attitude and practice of HIV Post Exposure Prophylaxis of the health workers . The result showed from this study 40.6 of them had never heard of PEP and 71 of them had at list one experienced exposure potential risk factors like needle injury. As conclusion the researcher recommended that knowledge about PEP is low and practice of using PEP was not established even though PEP is available in the Hospital (15).

Another study in Uganda in Mulungo Hospital confirmed that among 190 Health workers respondent 61% believed PEP able to reduce risk of HIV infection. It was also noted that many were not sure when PEP is started following exposure to occupational exposure (16)

A study by occupational Health & Safety Department of Bay state Health System, in USA found out that forty-six health care workers who were started on HIV PEP; according to this study their risk status of the source patient, rather than type of exposure, was a significant determinant for both initiating and completing treatment. Of those exposed to HIV-positive sources, 79% completed the full 28 days of therapy. Only 22% of all health care workers who started PEP discontinued treatment because of adverse effects (17).

Knowledge, attitude and practices among health care workers on needle-stick injuries, this article examines the results of a study of healthcare workers knowledge of PEP after needle stick injury in Katmandu, Nepal. The survey examined their knowledge of what diseases could be transmitted by needle stick injury, their own experience with NSI and other issues related to PEP. The researchers found that the survey reported high rates of incorrect procedures, including needle reuse, and practicing without gloves. The authors recommend the use of new needle less or reduced risk procedures, as well as the creation (19).

### **Factors of HIV post Exposure prophylaxis use**

On the other study in the Department of Genito-urinary Medicine, of Edinburgh, in UK showed that female health workers reported exposure incidents sooner than their male counterparts ( $P=0.01$ ). Post-exposure prophylaxis for HIV was offered to 22 (29%) of 76 referred individuals, and was accepted by 13 (59%) persons. The course of PEP drugs was discontinued by five (38%) of the 13 individuals after consented post-incident HIV testing of the source patients showed that they were HIV-sero-negative. Five of eight individuals completed the course of PEP medication (18).

One researcher conducted a case control study on Health Care Providers with occupational exposure to HIV-infected blood and concluded that the probability of HIV infection when taking HIV PEP following exposure was reduced by 81 %. On occupational exposure to HIV in Health Care Settings medical article it was explained the procedure for provision of PEP for health workers. It outlined the risks and benefits of the different regimes.



It further explains current public health guidelines for the administration of PEP. The article begins with a case example and concludes with recommended procedures for such a case (20).

Cochrane review on Antiretroviral Post Exposure Prophylaxis for occupational HIV exposure has found no randomized controlled trials except one case-control study. In this review HIV transmission was significantly associated with deep injury (OR 15, 95% CI 6.0 to 41), visible blood on the device (OR 6.2, 95% CI 2.2 to 21), procedures involving a needle placed in the source patient's blood vessel (OR 4.3, 95% CI 1.7 to 12), and terminal illness in the source patient (OR 5.6, 95% CI 2.0 to 16). After controlling for these risk factors, no differences were detected in the rates at which cases and controls were offered post-exposure prophylaxis with zidovudine.

However, cases had significantly lower odds of having taken zidovudine after exposure compared to controls (OR 0.19, 95%CI 0.06 to 0.52). No studies were found that evaluated the effect of two or more antiretroviral drugs for occupational PEP (21).

### **3. Objectives**

#### **3.1. General objective**

To assess the KAP of HIV Post Exposure Prophylaxis treatment use among health professionals of Government Hospitals in Addis Ababa

#### **3.2. Specific objectives**

- To assess the knowledge of HIV Post Exposure Prophylaxis treatment among health professionals
- To describe the attitude of the health professionals on HIV Post Exposure Prophylaxis
- To determine the practice of the health professionals on HIV Post Exposure Prophylaxis.

## **4. Methods**

### **4.1. Study area**

The study population is found in Addis Ababa at five governmental hospitals. Addis Ababa is the capital city of Ethiopia, which is located at an altitude of 7,546 feet (2,300 meters) and is a grassland biome; located at 9°14' 48" N 38°44' 24" E coordinates. As a chartered city, Addis Ababa has the status of both a city and a state. The city is populated by people from different regions of Ethiopia.

Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia (CSA), Addis Ababa has a total population of 2,739,551, of whom 1,305,387 are men and 1,434,164 women; all of the populations are urban inhabitants. For the capital city 662,728 households were counted living in 628,984 housing units, which results in an average of 4.1 persons to a household (22).

In Addis Ababa City administration there are five public hospitals, namely: Yekatit 12, Menilik, Zewditu, Gandhi and Ras Desta, all the five hospitals have HIV unit and provide HCT & ART services, also Post Exposure Prophylaxis service available in these hospitals for health workers. Health professionals working in these hospitals considered for the study. As accessed from the hospitals employee record, one thousand seventy three (1073) health professionals are available in these five hospitals.

### **4.2. Study Design**

The study was institutional based cross sectional design to answer its stated objectives. Quantitative data collection method had been employed. The information had been collected through self administered structured questionnaires and the collected information's have been used to determine Knowledge, attitude and use of HIV Post Exposure Prophylaxis among the health professionals.

### 4.3. Study Population

The source population for this study was the health workers who are working in Addis Ababa at five governmental hospitals. Study population was the health workers those are registered and working as a permanent employee in Yakatit 12, Menilik, Zewditu, Gandhi and Ras Desta hospitals. All health professionals who are working as permanent employees in direct patient care activity in the selected Hospitals were included in the study.

However, Health professionals that do not work with needles/ blood contact were excluded from the study such as pharmacist, pharmacy technical, radiographer and radiologist.

### 4.4. Sample size and Sampling

#### 4.4.1. Sample size

The sample size of the study was determined based on the assumption of 50% prevalence of knowledge, attitude and practice to Post Exposure Prophylaxis with 5% margin of error and 95% confidence level were assumed for the calculation of sample size for this study using the formula for single population proportion. Furthermore, a 10% of the calculated sample was added for non respondent rate.

$$n = Z_{\frac{\alpha}{2}}^2 \frac{P(1-P)}{d^2}$$

n= number study subject

P= 0.5(prevalence knowledge and attitude of post exposure prophylaxis)

d= 0.05 margin of error

Z= Z score Corresponding 95% certainty

n = (1.96)<sup>2</sup>\* 0.5 (1-0.5)

(0.05)<sup>2</sup>

$$n = 384$$

Additional 10% none respondent rate was considered.

$$N = 384 + (384 \times 0.1) = 422$$

**Final total sample size = 422**

#### **4.4.2. Sampling**

The total sample size was proportionally distributed to five Hospitals based on each hospital population size. All health professionals who were giving direct patient care in each hospital were included in the study. The number of professions to be considered was determined by random sampling on the availability of the health professionals with proportion to size of the stratum.

#### **Sampling procedure**

**Step 1-** Under Addis Ababa city administration five government hospitals available and all were considered as intervention area for there are no more option to be taken

**Step2-** Total sample size was proportionally distributed to five Hospitals based on each hospital population size

**Step3-** All health professionals who were giving direct patient care in each hospital were included

**Step4-** The number of professions to be considered was determined by random sampling on the availability of the health professionals with proportion to size of the stratum

The study population consisted of Specialist physicians, General Practitioners, Health Officers, Nurses, Midwives, Dentistry's, ophthalmic surgeons, Health assistances, Anaesthetics and laboratory technicians.

#### **4.5. Data collection tools and procedures**

Five experienced data collectors, who are grade 12 and above and two supervisors who have had an experience in supervising data collection were recruited. The principal investigator trained the data collectors and supervisors for one and half days. The training focused on objective of the study, confidentiality and written consent. Pre test was conducted in Black lion and Alert Hospitals which was not part of the main study, 40 Health professionals 20 from each hospital were participated in the pre test. The questionnaire was checked for its clarity, understandability and simplicity in getting what it was aimed at. At the same time questionnaire were further refined for their redundancy and sequential order .After the pre test, the questionnaire was reformatted based on the inputs and comments generated. The pre tested questionnaire was used for the actual data collection. The five data collectors were distributed the self administered questionnaire to the health professionals in their assigned hospitals with the assistance of HIV unit head nurses .During the distribution of the questionnaires the health professionals had been informed to fill the questionnaires individually and separately .The principal investigator coordinated, monitored and provided the necessary technical support on the overall data collection processes and procedures. The data collection took place between January 25 and February 4, 2011.

#### **4.6. Data quality**

Structured questionnaire was developed originally in English and then translated in to Amharic .The translation was tested by different individuals. Based on the feedbacks which were gathered from the pre test, different adjustment and restructuring had been made. Supervision was carried out daily bases by supervisors and every other day by principal investigator to keep the quality. Completed For each questionnaire sequential number was given to trace and correct problem at entry level and regular data entry supervision was conducted.

In addition, the prime investigator checked 10% of the entered data its correctness using questionnaire ID, the process contributed a lot to assure the quality of data.

#### **4.7. Data Analysis**

After data collection was completed in five hospitals, data entry and cleaning were done manually and entered SPSS version 17 for windows. Analysis was also conducted after rechecked and using the same software. Frequencies and composite score index were used to summarize descriptive statistics of the data. The data was presented using, tables, percentages, graphs and mean values to describe the knowledge, Attitude and use of Post Exposure Prophylaxis treatment.

**Variables of the Study are as follows.**

##### **Outcome Variables**

- Knowledge, Attitude and Practice (KAP) of PEP

#### **4.8. Operational Definitions**

##### **Knowledge about PEP Service:**

**Good Knowledge:** Correctly responding to at least five or above of the six PEP

Knowledge questions

**Fair Knowledge:** Correctly responding to at least three or four of the six PEP

Knowledge questions.

**Poor knowledge:** Correctly responding to two and less than of the six PEP

Knowledge questions.

**Use of PEP:** Eexperience in reporting as they have practiced using Post

Exposure Prophylaxis of HIV

**PEP-** Post Exposure prophylaxis (preventative) medications given after an HIV or suspected HIV exposure in hopes of decreasing the likelihood of HIV infection from the exposure. The PEP medication combinations used depends on the degree of exposure and the HIV status of the source of the exposure.

#### **4.9. Ethical consideration**

Ethical clearance was obtained from the Joint program of Addis Continental Institute of Public Health and university of Gondar. Support letter was also obtained from Addis Ababa Health Bureau, after reviewed the research objectives and overall research processes. Written consent was obtained from the study subjects before collecting the data to confirm their willingness of participation. The participation in the study was fully voluntarily; confidentiality and anonymity were also maintained.



## **5. Results**

### **5.1. Socio Demographic Characteristics**

A total of 396 people responded to the questioner from five government Hospitals (Yekatite 12, Minilke, Zewiditu, Ras Desta and Gandhi Hospital) out of 422 proposed study samples giving a response rate of 93.8%. Only 26 (6.2%) health professionals were not willing to take the questioner. The age of the respondents ranges from 19 to 59 years and the mean was 31.45 years with SD 8.6. As to their sex 244 (61.6) were female and 152(38.4) male. The majority of the respondents 201 (50.75%) were currently single and followed by currently married 178 (44.9%) and others 14 (3.56) were currently separated, widowed and divorced.

The majority of the respondents 252 (67.74%) were nurses while the rest were doctors 66 (17.74 %), laboratory technicians 35(9.41 %), Midwives 19 (5.11%) and Health officers 19 (4.8%). Most of the respondents 87(22.25%) were starting working as a health professional for about 5 to 7 years. Mean of the service year is 3.14. (Table 1)

Table 1: Socio-demographic characteristics of respondents (health professionals) in Addis Ababa, from January- February, 2011

Variables	Frequencies	%
<b>Sex</b>		
Female	244	62
Male	152	38
<b>Age</b>		
19-29	201	51
30-40	129	34
41-50	42	11
52-59	12	3
<b>Marital status</b>		
Currently single	201	51
Currently married	178	45
Currently dissolved	14	4
<b>Professions</b>		
Doctors	66	17
Nurses	252	64
Midwife	19	5
Lab technicians	35	9
Health offices	19	5
<b>Service years</b>		
less than two years	73	19
2-4 years	77	20
5-7years	87	22
8-10years	30	8
11 and above	124	32

## 5.2. Knowledge of health professionals towards Post- Exposure Prophylaxis

Sixty five (98.48%) Doctors, 249 (99.2 %) Nurses, 19 (100 %), Midwives, 35 (100%) Lab technicians and 19 (100%) health officers have heard about HIV PEP. (Tabel2)

Only fifty six (84.84 %) doctors, two hundred (81.63%) Nurses, eighteen (94.73%) Midwives, twenty-four (77.41%) lab technicians and eighteen (94.73%) Health Officers were aware about the Post Exposure Prophylaxis treatment duration as 28 days. (Tabel2)

It was also found that number of respondents, doctors fifty five (88.33% ) , nurses one hundred ninety three ( 79.42%), Midwives seventeen ( 89.47%), lab technicians twenty four ( 70.58% )

and Health Officers seventeen (89.47% ) knew the maximum initiation time (72HRS)of HIV Post exposure prophylaxis treatment . (Tabel2)

In addition, forty three (23 %) Doctors, one hundred sixty seven (76%) Nurses, fifteen (4%) Midwives, twenty (14%) lab technicians and sixteen (3%) health officers knew the drugs used for Post Exposure Prophylaxis treatment and responded drugs used for Post exposure prophylaxis are the same drugs used for Anti retroviral treatment for AIDS patients.( Tabel2)

Unfortunately, only seventeen (26.56%) Doctors, forty-seven (19.66%) Nurses, four (21.05%) Midwives, six (15.38%) lab technicians and four (21.05%) Health officers were knew peritoneal fluid is high risk for HIV transmissions. Similarly, only fifteen (23.47%) Doctors, thirty nine (16.31%) Nurses, three (15.78%) Midwives, 5 (14.70%) lab technicians and 4 (21.05%) Health officers have identified plural fluid as high risk for HIV transmissions, which majority should have the knowledge of plural fluid as high risk for HIV transmission.( Tbael2)

Similarly, only nineteen (29.68 %) Doctors, forty-seven (20.25%) Nurses, four (21.05%) Midwives, twelve (35.29%) lab technicians and five (26.31%) Health officers knew cerebro spinal fluid is high risk body fluid for HIV transmissions. (Tabel2)

On the other hand the majority , 100 %of Midwives, 98% of Doctors, 95% of Nurses, 88% of lab technicians and 84% Health officers correctly identified blood is high risk for HIV transmission.( Tabel2)

Similarly, thirteen (68.42%) Health officers, eleven (61.1%) Midwives, thirty four (58.6 %) Doctors, one hundred thirty 130(56.2%) Nurses and eleven (33.3 %) Lab technicians were aware of effectiveness of HIV post Exposure Prophylaxis drugs in preventing HIV transmission.(Table 2)

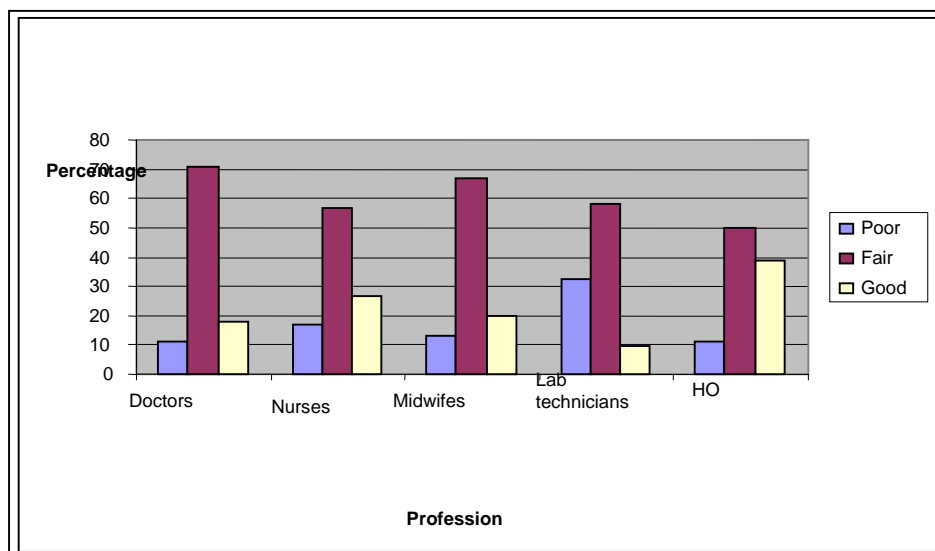
Table 2: Response for selected six knowledge questions of Post Exposure Prophylaxis at five Government Hospitals in Addis Ababa from January- February, 2011

<b>Variables</b>	<b>Doctors</b>	<b>Nurses</b>	<b>Midwife</b>	<b>Lab technicians</b>	<b>Health officers</b>	<b>Totals</b>
Heard about HIV PEP						
Yes	<b>65(98%)</b>	<b>249(99%)</b>	<b>19(100%)</b>	<b>35(100%)</b>	<b>19(100%)</b>	<b>387(99%)</b>
No	<b>1(2%)</b>	<b>2(1%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3(1%)</b>
Period of PEP treatment						
Correct response	<b>56(85%)</b>	<b>200(82%)</b>	<b>18(95%)</b>	<b>24(77%)</b>	<b>18(95%)</b>	<b>316(83%)</b>
No correct resp.	<b>10(15%)</b>	<b>45(18%)</b>	<b>1(5%)</b>	<b>7(23%)</b>	<b>1(5%)</b>	<b>63(17%)</b>
Maximum time to initiate PEP						
Correct response	<b>55(83%)</b>	<b>193(79%)</b>	<b>17(89%)</b>	<b>24(71%)</b>	<b>17(89%)</b>	<b>306(79%)</b>
NO correct resp	<b>11(17%)</b>	<b>52(21%)</b>	<b>2(11%)</b>	<b>10(29%)</b>	<b>2(11%)</b>	<b>77(20%)</b>
Body fluids high risk for HIV transmissions (Peritoneum )						
Correct response	<b>17(27%)</b>	<b>47(20%)</b>	<b>4(21%)</b>	<b>6(18%)</b>	<b>4(21%)</b>	<b>78(21%)</b>
No correct resp	<b>47(73%)</b>	<b>192(80%)</b>	<b>15(79%)</b>	<b>28(82%)</b>	<b>15(79%)</b>	<b>297(79%)</b>
Plural						
Correct response	<b>15(23%)</b>	<b>39(16%)</b>	<b>3(16%)</b>	<b>5(15%)</b>	<b>4(21%)</b>	<b>66(18%)</b>
No correct resp	<b>49(77%)</b>	<b>200(84%)</b>	<b>16(84%)</b>	<b>29(85%)</b>	<b>15(79%)</b>	<b>309(82%)</b>
Cerebrospinal fluid						
Correct response	<b>19 (30%)</b>	<b>47(20%)</b>	<b>4(21%)</b>	<b>12(35%)</b>	<b>5(26%)</b>	<b>87(23%)</b>
NO correct resp	<b>45(70%)</b>	<b>192(80%)</b>	<b>15(79%)</b>	<b>22(65%)</b>	<b>14(74%)</b>	<b>288(77%)</b>
Blood						
Correct response	<b>63(98%)</b>	<b>228(95%)</b>	<b>19(100%)</b>	<b>30(88%)</b>	<b>16(84%)</b>	<b>356(95%)</b>
NO correct resp	<b>1(2%)</b>	<b>11(5%)</b>	<b>0</b>	<b>4(12%)</b>	<b>3(16%)</b>	<b>19(5%)</b>
Which drug contains HIV PEP treatment?						
Correct response	<b>43(65%)</b>	<b>167(69%)</b>	<b>15(79%)</b>	<b>20(59%)</b>	<b>16(84%)</b>	<b>261(69%)</b>
NO correct resp	<b>23(35%)</b>	<b>76(31%)</b>	<b>4(21%)</b>	<b>14(41%)</b>	<b>3(16%)</b>	<b>120(31%)</b>
Effectiveness of HIV PEP drugs?						
Correct response	<b>34(59%)</b>	<b>130(56%)</b>	<b>11(61%)</b>	<b>11(33%)</b>	<b>13(68%)</b>	<b>199(55%)</b>
NO correct rep	<b>24(11%)</b>	<b>101(14%)</b>	<b>7(639%)</b>	<b>22(67%)</b>	<b>6(32%)</b>	<b>160(45%)</b>

Only ten (18.8%) Doctors, fifty five (26.57%) Nurses, three (20%) Midwives, three (9.68%) Laboratory Technicians and seven (23.93%) Health officers had ‘Good Knowledge’ where as 39(70.91%) Doctors, 117(56.52%) Nurses, 10(66.67%) Midwives, 18(58.06%) Laboratory Technicians and 9(50%) Health officers had Fair Knowledge and the rest 6(10.91%) Doctors, 35(16.91%) Nurses, 2(13.33%) Midwives, 10(32.64%) lab technicians and 2(11.11%) Health officers had ‘Poor Knowledge’ about HIV Post Exposure Prophylaxis.

Regarding of compressive knowledge of the health professionals on HIV Post Exposure Prophylaxis , only 79 (23.87 %) health professionals had good knowledge, 196(59.21%) had fair knowledge and the rest 56 (16.92%) had poor knowledge about Post Exposure Prophylaxis. (Figure 1)

Figure1: knowledge of health professionals on HIV PEP in Addis Ababa at five governments hospitals in Addis Ababa, from January-February, 2011



### 5.3. Knowledge and source of information

Vast majority of the respondents their sources of information about HIV post exposure prophylaxis were from health facilities 251(64.19%), from training 78(19.95%) and from media 55(14.07%).

The vast majority of respondents 360(92.54%) were aware the availability of the Post Exposure Prophylaxis service in their Hospitals prior to the survey. Although 276 (71.68%) of respondents knew the assigned focal person to contact for the PEP service in their Hospitals. (Table 2)

Table3: Knowledge of source of information of health professionals about HIV Post Exposure Prophylaxis at five government's hospitals in Addis Ababa, from January- February, 2011

<b>Variables</b>	<b>Frequency</b>	<b>Present %</b>
<b>First time you heard about HIV</b>		
Less than six months	18	5
6-11 months	55	14
1-5 years	202	51
before 5 years	60	15
<b>Source of information</b>		
From health facility	251	66
From media	55	14
From training	78	20
<b>Is PEP service available in this hospital</b>		
yes	360	93
No	2	0.51
<b>I there any focal person to contact for PEP service in your hospitals</b>		
yes	276	72
No	35	9

#### 5.4. Attitude of health professionals towards PEP service

Out of three hundred eighty five respondents, three hundred thirty eight respondents( 87.79%) , Doctors (16.27% ), Nurses (89.51% ) , Midwives ( 77.77% ), lab technicians (88.57%) and (84.21%)Health officers were willing to take Post Exposure Prophylaxis service from their workplace if they are accidentally exposed to HIV infectious body fluids. On the other hand,12.20%.are not willing to take the Post Exposure Prophylaxis drug in case they are exposed to HIV infectious body fluids due to their belief that Post Exposure Prophylaxis is not helpful to prevent HIV infection and for fear of the service confidentiality system of the provision of the treatment .

The Majority of the respondents two hundred twenty eight (67.45%) were preferred to take the service from their respective health facility. The other one hundred nine (32.24%) were preferred to get the service out side their working place. Only one (0.2%) respondent was comfortable to take the Post Exposure Prophylaxis service from any health facilities. Almost all the respondents (96.56%) were agreed to recommend PEP to their colleagues in case of whenever it is needed. (Table 4)

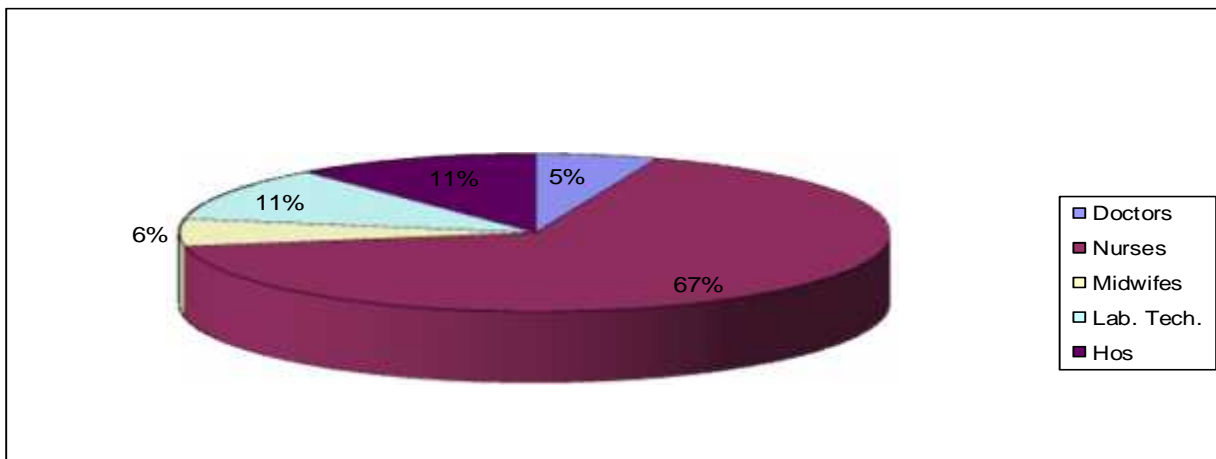
**Table 4:** Willingness of health professionals to take PEP service if exposed to potentially infectious body fluid to HIV

Response	Frequency	%
Willing to take PEP	338	88
Not willing to take PEP	47	12
Prefer to get the PEP service in your Hospital	228	67
Prefer to get the PEP service out side my Hospital	109	32
Prefer to get the PEP service from any health facility	1	0.2
Recommend PEP to college	365	95

### 5.5. Utilization of PEP service by health professionals

The study revealed that 55(20%) health professionals had been exposed by body fluids while they are working their duty. Among these exposed 37 (67.27. %) of health professionals utilized HIV Post Exposure Prophylaxis treatment. The rest 17(32.72%) health professionals didn't utilize the HIV PEP due to fear of the drug side effects, believe the exposure was at low risk for HIV and fear of stigma in the workplace or in the family. Among these 19( 54.28%) utilized HIV Post Exposure Prophylaxis after exposed to needle stick injury , next to this 14(40%) respondents utilized after exposed to splash on eye contamination and the remaining 2( 5.7%) utilized after exposed to others exposure . Among 37 HIV Post Exposure Prophylaxis users 32(86.48 %) completed the regimen as prescribed. Only 5(13.5%) didn't complete the regime due to the drug side effect. (Figure 2)

Figure 2: PEP utilization by health professionals in Addis Ababa at five government hospitals in Addis Ababa from January- February, 2011





## 6. Discussion

This study assessed the knowledge, attitude and practice of health professionals on HIV Post Exposure Prophylaxis use in Addis Ababa at five government hospitals. Post-exposure prophylaxis (PEP) is a prophylactic treatment started immediately after exposure to a pathogen. In reality HIV PEP prefer to be initiated one hour after exposure. However, up to 72 hours can start and will reduce eighty-one per cent of HIV transmission. In this study 98.48% Doctors, 99.2 % Nurses, 100 %, Midwives, 100% Lab technician and 100% health officers had heard about HIV PEP. The figure was high compared to study conducted in London that is 93% doctors heard about HIV Post Exposure Prophylaxis (12).

The finding of this study revealed that many health professionals 88.3% doctors, 79.42% nurses, 89.47% midwife and 70.58% midwife had knew the maximum time of HIV Post Exposure Prophylaxis treatment has to be initiated. This finding relatively better than study conducted in Malaysia level of awareness amongst HCW (doctors and nurses) working in Hospital Sungai Petani regarding the Post Exposure Prophylaxis in case of needle stick injuries from confirmed or suspected cases of HIV i.e only 73.5% doctors 65% nurses stated that prophylaxis should be started immediately after injury (10). Similar study done in Ethiopia in in Bahir Dar town, Northwest Ethiopia, 2009 on Assessment of KAP and factors associated with Post Exposure Prophylaxis service utilization among health professionals indicated that only 63.3% of respondents know correctly when the maximum time to initiate Post Exposure Prophylaxis (14). The difference might be the two studies were done in federal and regional level.

Likewise, in the present study the vast majority of the respondents this study revealed that 84.84 % doctors, 81.63% Nurses, eighteen 94.73% Midwife, 77.41% lab technician and

94.73% Health Officers knew about the Post Exposure Prophylaxis treatment duration as 28 days. This is higher than the findings of Malaysia where only 17% of doctors and 15% of nurses knew the correct duration and that of the study done in health professionals in Bahir Dar town; North West Ethiopia 86.4% Doctors, 68.3% Nurses, and 48.9% Laboratory Technicians knew PEP is given for 28 days (10, 14).

The study shows that the over all knowledge of the health professionals on HIV Post Exposure Prophylaxis is only 23.87 % had good knowledge 59.21% had fair knowledge and the rest 16.92% had poor knowledge about Post Exposure Prophylaxis. This is higher than the result shown in the study conducted in Malaysia, which reported that 50% of Doctors and Nurses had fair knowledge about Post Exposure Prophylaxis. Though, the case relatively better in Ethiopia knowledge of HIV PEP among health professionals is not as it supposed to be. Other literatures also supported that the knowledge about Post Exposure Prophylaxis among healthcare workers is poor (11, 12) and much work has to be done to raise the awareness of health workers regarding PEP of HIV.

The study shows that vast majority of the respondents 251(64.19%) their sources of information about HIV post exposure prophylaxis were from health facilities the rest from training 78(19.95%) and media 55(14.07%) This implies that, there is no systemic culture in providing information about the issue under discussion or PEP in the health service provision systems.

Another important issue of the study was attitude regarding Post Exposure Prophylaxis which was found 87.79%, were willing to take Post Exposure Prophylaxis service from their respective hospitals if they are accidentally exposed to HIV infecosouse body fluids.

The others 12.20% were not willing to take the Post Exposure Prophylaxis drugs were: the reason they provided for this were Post Exposure Prophylaxis is not helpful to prevent HIV infection and fear of the service confidentiality system within these hospitals. This result implies the existence of misconception and lack of knowledge about HIV PEP.

Among the willing respondents 67.45% were preferred to take the service from their respective health facility. The other 32.24% were preferred to get the service outside their working place. Only one 0.2% respondent was comfortable to take the PEP service from any health facilities. This could be due to fear of stigma and discrimination, lack of self confidence of the respondents in the study area.

Based on the study findings, only 37 (68.5 %) health professionals utilized HIV Post Exposure Prophylaxis treatment. This is higher than Department of Genito-urinary Medicine, of Edinburgh, in UK study result. The result showed Post Exposure Prophylaxis for HIV was offered to 22 (29%) of 76 referred individuals (18). This finding also, higher when we compared to studies done in Jimma 17.4% and Bihar Dar 19% (13, 14).

However, the results lower than study conducted in USA with the result of Post Exposure Prophylaxis for HIV was offered for 79% individuals. (17).

On the other hand among 37 HIV Post Exposure Prophylaxis users 32(86.48 %) of them completed the regimen as prescribed. Only 5(13.5%) didn't complete the regime due to the drug side effect. This result is higher than finding of USA study (79%) and Ethiopia Bahir Dar Study 6 (50%) completed the regimen (17, 14). Thus, drug side effect is a threat to successful completion of the prescribed drug regimen.

## **7. Strengths and Limitations**

### **7.1. Strengths**

- The stated objective for this study properly met
- ,the study questionnaires adequately relevant and properly pre tested
- Relevant data were collected and all the data efficiently used
- Statistical application software utilized

### **7.2. Limitations**

The study were used quantitative approach only, if the study included qualitative approach the result would be stronger than this one. In addition, the data were collected through self administered questionnaire due to that some respondents skipped very relevant expected information, which may positively affect the current result. On top of this, this particular study is limited in area, only to Addis Ababa, and limited on addressing only public hospitals for the researcher believes that if it is extended beyond their would be a problem of time and data management.

## **8. Conclusions**

Based of the findings of the study the following conclusions are made:

- Knowledge and practice of health professionals about HIV PEP is found inadequate
- Systemic culture in providing information about HIV PEP in the health service provision systems are not well addressed
- Majority of health professionals have positive attitude to receive HIV PEP. However, some of staff members in some targeted hospitals still have fear of stigmatization to take the service from their working hospital

- Gaps are observed on the knowledge among health professionals to identify of high risk body fluid for HIV transmission
- Health professionals lack critical observation towards PEP and most likely varies due to their exposure to the incidence
- Majority of health professionals expressed that do not have exposure to risk of HIV, only few exposed and used PEP. Among them, 50% of predominately exposed to HIV due to needle stick injury
- Adherence to the recommended regiments is a big threat for health professionals due to observable side effects

## **9. Recommendation:**

- The provision of knowable about PEP in integrated training curriculum is desirable
- Employees should provided with all inclusive induction including PEP
- Planned refreshment event should be in place to reduce the knowledge gap of PEP
- Incidence should be treated interactively with other medication to avoided stigmatization and fear of the victims
- To avoid needle stick injuries proper infection prevention should be in place
- Proper and continues counseling and guidance should be provided to victims on adherence to medication , to reduce the risk of terminations

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## **Annexes:**

### **Annex 1:** Information Sheet and consent form

Information Sheet and consent form for research participants on assessment of KAP of Health professionals on HIV post- Exposure Prophylaxis use in Addis Ababa at five Government Hospitals

**Name of Principal investigator: Hibret Getaneh Zeleke**

#### **Introduction**

This information sheet and consent form is prepared to explain the research or study you are being asked to participate. Please review this form carefully and ask any questions about the study before you agree to participate. You can ask questions at any time after joining the study.

#### **Purpose of Research**

The main purpose of the study is to assess knowledge, attitude and practice of health workers on HIV Post Exposure Prophylaxis use in your health facility.

This study will help the government and different actors working on HIV prevention in your Hospital and other similar Hospitals to have better strategies and improve the services in the future. In addition to this it would help and use as a benchmark for further researches.

#### **Procedure:**

If you are willing to participate in this research, you need to understand and sign the agreement form. Then, you will be providing the self administered questionnaire by the data collector to give your response. You do not need to write your name on the questionnaire.

**Incentives:**

There is no benefit/ incentive for the information you are providing for us for this study.

**Confidentiality:**

The information we will gather from this research will remain completely confidential and will be kept confidential, will be used only for this research project. The questionnaire you are asked to fill will not asking you your name so that it will be anonymous it will be reported as an average view and not be as a view of specific person.

**Risk/ Discomfort:**

There is no any anticipated harm which will happen on you due to your participation in this research.

**Right to refuse or withdraw:**

Your participation in this research is fully based on your will and it is voluntary. You have full right to refuse from participating in this research. You can decide not to respond to some or all questions if you don't want to.

**Persons to contact:**

If you have any question, please contact the following two persons.

1. Hibret Getaneh

Cell pone: +251-911-24 – 85- 12

If you agree to be participated in this study, please sign below.

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Name and Signature

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Date

---

Signature of Secondary subject

---

Date

---

Signature of a person obtaining consent

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Date

በአዲስ አበባ አስተዳደር ስር በሚገኙ አምስት የመንግስት ሆስፒታሎች ውስጥ ለሚሰሩ ጤና

ባለሙያዎች የኤች አይ ቪ መጋለጥ በሃይላ ስለሚወሰድ መድሃኒት/Post Exposure Prophylaxis/

በተመለከተ ያላቸውን እውቀት፡ አመለካከት እና አጠቃቀም ለማወቅ ለሚደረግ ጥናት የተዘጋጀ የመረጃ

መሰብሰቢያ እና የስምምነት መግለጫ ቅጽ፤፤

ዋና የጥናቱ አጥኝ- ሕብረት ጌታነህ ዘለቀ

መግቢያ

ይህ የማብራሪያ እና የስምምነት መግለጫ ቅጽ የተዘጋጀው እርስዎ እንዲሳተፉበት የምንጠይቅዎትን የምርምር ጥናት የሚያብራራ ነው። እባክዎ በዚህ ጥናት ለመሳተፍ ከመወሰንዎ በፊት ይህንን ቅጽ በጥንቃቄ በማንበብ ጥያቄዎች ካለዎት ይጠይቁ። በዚህ ጥናት መሳተፍ ከጀመሩ በሃላም በማንኛውም ጊዜ ምንም አይነት ጥያቄ ካሎት መጠየቅ ይችላሉ።

**የምርምር ፕሮጀክቱ ዓላማ**

የዚህ ምርምር / ጥናት ዓላማው በዚህ ጤና ተቃውሞ ውስጥ የሚሰሩ የጤና ባለሙያዎች ለ ኤች አይ ቪ ከተጋለጡ በሃላ ስለሚሰጥ ህክምና /Post Exposure Prophylaxis/ ያላቸውን እውቀት፤ አመለካከት እና ተግባር እንዲሁም የአገልግሎቱን አጠቃቀም ለማወቅ የታለመ የምርምር ጥናት ነው።

ይህ ጥናት በስራላይ በሚደርስ የየኤች አይቪ መጋለጥን በመከላከል ላይ ለሚሰሩ የመንግስት እና መንግስታዊ ያልሆኑ ድርጅቶች ለወደፊት የተሸለ እቅድ እንዲያወጡ እና የበለጠ የሚሰጥውን የህክምና አገልግሎትን ለማሻሻል ይጠቅማል። በተጨማሪም ወደፊት ለሚደረጉ ሰፊ ምርመሮች መነሻ ሆኖ ሊያገለግል ይችላል።

**የአሰራር ሂደት፡**

በዚህ ጥናት ውስጥ ለመሳተፍ ከተስማሙ ስምምነቱን በደንብ መረዳት እና እንዲሁም መፈረም ይኖርበታል። ከዚህ በሃላ መረጃ ሰብሳቢው እርስዎ የሚሞሉት መጠይቅ ይሰጥዎታል። ስምዎን መፃፍ አያስፈልግዎትም። የሚሰጡት መረጃ ሚስጥራዊነቱ ይጠበቃል።

**የተሳትፎ ክፍያዎች፡**

በጥናቱ በመካፈል ለሚሰጡን ማንኛውም መረጃ ምንም አይነት ክፍያ አይኖረውም

**ሚስጥር ስለመጠበቅ፤**

ለዚህ ጥናት የሚሰበሰብ መረጃ በሚስጥር ይጠበቃል። በሚሞሉት መጠይቅ ላይ ስምዎን መፃፍ አያስፈልግም ስለዚህ የሚሰበሰበው መጠይቅ የእርስዎ ለመሆኑ መለያ አይኖረውም። ጥናቱ በሚጠናቀቅ ጊዜ መረጃዎቹ ጠቅላላ ባለ መልኩ ይቀርባሉ ስለዚህ የማንንም ግለሰብ ስም አይጠቅሱም።

**አደጋዎች**

በጥናቱ ላይ በመሳተፍ ምንም አይነት ተያያዥነት ያለው ጉዳት ሊደርስቦት አይችልም።

**በጥናቱ ያለመሳተፍ ወይም ራስን ከጥናቱ የማግለል መብት፡**

በዚህ ጥናት ውስጥ መሳተፍ ሙሉ በሙሉ የእርስዎ ፍቃድ ነው ፤ በዚህ ጥናት ላለመሳተፍ ከፈለጉ ያለመሳተፍ ሙሉ መብት አለዎት። ከመጠይቁ ውስጥ ጥቂት ጥያቄዎችን ወይም ሙሉ በሙሉ አለመመለስም ይችላሉ።

**የዚህ ጥናት ዋናው ተጠሪ፡**

**ስለዚህ ጥናት ማነጋገር ከፈለጉ ከታች የተቀመጠውን አድራሻ በመጠቀም የጥናቱን ዋና ተጠሪ ማነጋገር ይችላሉ።**

**1-ሀብረት ጌታነህ**

**ስ.ቁ፤            911248512**

**በዚህ ጥናት ለመሳተፍ ከተስማሙ እባክዎ ስምዎን ወይም ፊርማዎን ከዚህ በታች ያስቀምጡ።**

**የተሳታፊው ስምና ፊርማ ----- ቀን -----**

**የሁለተኛ ተሳታፊ ስምና ፊርማ ----- ቀን -----**

**የስምምነት ተቀባይ ስምና ፊርማ ----- ቀን -----**

## Annex 2: Study data collection tools

Questionnaire on Knowledge, Attitude and Practice of Health professionals on Post

Exposure Prophylaxis (PEP) use

Name of the Hospital: -----

Date:            Day-----Month -----Year-----

For all below questions, please indicate /circle your answer

1-Age -----

2-sex

1- Female

2- Male

3- Marital status

1. Single

2. Married

3. Separated

4. Divorced

5. Widowed

4- What is your profession?

1-Specialist physician

2-General Practitioner

3-Health Officer

4-Nurse

5-Midwife

6-Dentistry

7-Ophthalmic surgeon

8-Health Assistant

9-Anesthetics

10- Laboratory technician

5- How many years of service do you have as health professional?

1- Less than 2 years

2- 2- 4 years

3- 5 - 7 years

4-8- 10 years

5- 11 and more

6- How long have you providing service in this hospital? -----

7- Have you ever heard about HIV post exposure prophylaxis?

1- Yes

2- No

8- When was the first time you heard about HIV post exposure Prophylaxis?

- 1-Less than 6 months'      2- 6-11 months      3- 1-5 years
- 4-Before 5 years      5-Does not remember

9-Where did you hear about it?

- 1- At your Hospital      2-At a different Hospital, health centre and clinic
- 3-Through friends'      4-Through news and in magazines
- 4-Through radio      5- Training

10- Is PEP service available in this Hospital?

- 1-Yes      2-No      3- Do not know

11- If your answer to Q 10 is yes at what time HIV PEP drug available in the Hospital?

- 1- Normal working hours (Monday to Friday 8.30 am- 5.30 pm)
- 2- 24 hours available in the hospital
- 3- Other

12- Is there any focal person to contact for PEP service in your Hospital?

- 1- Yes      2- no

13- How long is PEP to be taken?

- 1-Life long      2-28 days      3-It is decided by the physician.
- 4-Do not know

14- What is the maximum time to initiate PEP if you were accidentally exposed to HIV via a needle stick injury?

- 1- 1 hour                      2-24 hours                      3-72 hours  
4-No time limit                      5-I do not know

15-Which of the following body fluids may be considered as high risk for the transmission of HIV on contamination

- 1-Saliva,                      2-Faces,                      3-Urine,                      4-Peritoneal fluid,  
5-Pleural fluid,                      6-Vomit,                      7- Cerebrospinal fluid    8- Blood

16- Which ARV drug do you believe contains HIV post Exposure Prophylaxis treatment?

- 1-The same as in normal Anti retro viral drug    2-The same one, but stronger  
3-A completely different drug                      4-Does not know

17- How effective are HIV post Exposure Prophylaxis drugs in preventing HIV ?

- 1-Almost always (99%)                      2-Three out of four (75%)  
3-Half of the times (50%)                      4-Less than the third part (30%)  
5-Does not know

18- Are you willing to take PEP service if accidentally exposed to HIV in the Work place?

- 1-Yes                      2-No                      3-Not sure

19- If your answer is “Yes” for question number 18, where do you prefer the PEP service to get?

- 1-In your Hospital    2-Out of your working facility    3-Any where



20- If your answer to question number 18 is “No”, what is your reason?

1-PEP service is not helpful to prevent infection

2-I don't know what PEP is.

3-Fear of stigma and discrimination

4-Fear of confidentiality break

5-Other specify. -----

21- Who should you think prescribe the PEP drug?

1-Doctor 2-Nurses 3-Midwives 4-Pharmacists 5-Other

22- Would you recommend PEP to colleagues in case of need?

1- Yes

2- No

23- According to you, which would be the best ways to inform HIV post

exposure prophylaxis for the health professionals?

1-At the clinic

2- At Hospital

3-Group talk's

4-Brochures

5-Posters

6-Other

24- Have you ever used HIV post exposure prophylaxis treatment?

1-Yes

2-No.

25- If your answer to Q 24 is “Yes”, what type of exposure did you have?

1-Splash

2-Needle stick injury

3-blade cutting

4-Other, specify -----

26- - If your answer to Q 24 is “yes”, did you complete the regimen as

prescribed by the health worker?

1-Yes

2- No

27-If your answer to Q 24 is” No”, what was the reason you did not take PEP?

- 1-The exposure was at low risk for HIV      2-Did not have time
- 3-Did not know about PEP      4-Did not know where to get it
- 5-Worried about side effects of drugs      6-Did not think it would work
- 7- Fear of stigma in the workplace or family
- 8 – I have never been exposed

28- Who recommended it for you?

- 1- A colleagues.      2- A physician      3-A nurse
- 4- Myself      5- Other

29- Have you received adequate counselling for the service?

- 1-Yes      2 –NO

**ጤና ባለሙያዎች የኤች አይ ቪ መጋለጥ በሃይል ስለሚወሰድ መድሃኒት/Post Exposure Prophylaxis/**

**በተመለከተ ስላላቸዉ እዉቀት፡ አመለካከት እና አጠቃቀም ለማጥናት የተዘጋጀ መጠይቅ**

የሆስፒታሉ ስም-----

መጠይቁ የተሞላበት ቀን----- ወር -----.ም

**ከታች ለተዘረዘሩት ሁሉም ጥያቄዎች እባክዎ መልስ ይሆናል የሚሉትን ያመልክቱ/ያክብቡ**

**1-እድሜ -----**

**2-ፆታ**

- 1. ሴት                      2. ወንድ**

**3-የጋብቻ ሀኔታ**

- 1. ያላገባ    2. ያገባ    3. የተለያዩ    4.የተፋቱ    5.የሞተበት/የሞተባት**

**4-በጤና ድርጅቱ ውስጥ ሙያዎት ምንድን ነዉ**

- 1. ስፔሻሊስት ሐኪም    2. ጠቅላላ ሐኪም    3.ጤና መኮንን    4.ነርስ**  
**5.አዋላጅ ነርስ    6-የጥርስ ህክምና ባለሙያ    7.የዓይን ህክምና ባለሙያ**  
**8.ጤና ረዳት    9- አንስቴቲክስ    10.ላቦራቶሪ ቴክኒሻን**

**5- በጤና ባለሙያነት በአጠቃላይ ለምን ያህል ጊዜ አገልግለዋል**

- 1. 2 አመት በታች    2. 2-4 አመት    3. 5-7አመት**  
**4. 8-10 አመት    5. 11አመት የበለጠ**

**6-ለምን ያህል ጊዜ በዚህ ሆስፒታል ውስጥ አገልግለዋል -----**

**7-ለኤች አይ ቪ ከተጋለጡ በሃላ ስለሚወሰድ መድሃኒት/Post Exposure Prophylaxis/**

**ስምተው ያዉቃሉን**

- 1. አዎ                      2.አልሰማሁም**

**8-ለመጀመሪያ ጊዜ ለኤች አይ ቪ ከተጋለጡ በሃላ ስለሚወሰድ መድሐኒት/Post**

**Exposure Prophylaxis የሰሙት መቼ ነው**

- 1.6 ወር አይሞላውም      2.6-11ወር በፊት      3.1-5 ዓመት ባለው ጊዜ  
4.5 ዓመት በፊት      5.አላስታውስም

**9- ለመጀመሪያ ጊዜ ለኤች አይ ቪ ከተጋለጡ በሃላ ስለሚወሰድ መድሐኒት/Post**

**Exposure Prophylaxis የሰሙት የት ነበር**

- 1.በሚሰሩበት ሆስፒታል  
2.በተለያዩ ሆስፒታል፣ጤና ጣቢያ እና ክልኒክ  
3.ከጉዳኞቹ  
4.መፀሐት ላይ በሚወጡ ዜናዎች  
5.በሬዲዮ  
6.በስልጠና ጊዜ

**10-ለኤች አይ ቪ ከተጋለጡ በሃላ የሚወሰድ መድሐኒት/Post Exposure Prophylaxis**

**በዚህ ሆስፒታል ውስጥ ይገኛል**

- 1.አዎ      2.አይገኝም      3.አላውቅም

**11-ለጥያቄ ቁጥር 10 መልስዎ አዎ ከሆነ በየትኛው ሰአት ለኤች አይ ቪ መጋለጥ በሃይላ**

**የሚወሰድ መድሃኒት/Post Exposure Prophylaxis እርሶ በሚሰሩበት ሆስፒታል**

**ውስጥ ይገኛል**

1. በመደበኛ የስራ ሰአት      2.ቀንም ለሊትም በተፈለገ ሰአት      3.ወይስ ሌላ-----

**12-በሆስፒታል ውስጥ ለኤችአይ ቪመጋለጥ በሃይላ ለሚሰጥመድሃኒት/Post Exposure**

**Prophylaxis በሚፈለግበት ጊዜ ሊያነጋግሩት የሚችሉት የተመደበ ስው አለ ወይ**

1. አዎ      2. የለም      3. አላቅም

13-ለኤች አይ ቪ ከተጋለጡ በሃላ የሚወሰድ መድሐኒት/Post Exposure Prophylaxis

የሚወሰደው ለምን ያህል ጊዜ ነው

1. እድሜ ልክ      2. ለ28 ቀን      3. በሀኪሙ ነው የሚወሰነው      4. አላውቅም

14-ለኤች አይ ቪ የተጋለጠ ሰው ከመጋለጥ በሃይላ የሚወሰድ መድሃኒት/Post Exposure

Prophylaxis/አገልግሎት ለመጀመር የመጨረሻ የጊዜ ገደብ ምን ያህል

- 1.1 ሰዓት                      2.24 ሰዓት                      3.72 ሰዓት

4. የጊዜ ገደብ የለውም                      5. አላውቅም

15--ከተዘረዘሩት ውስጥ ኤች አይቪን በማስተላለፍ ረገድ ከፍተኛ ሚና ያለው/ያላቸው

የሰውነት ፈሳሽ የትኛው/የትኞቹ ነው/ናቸው

1. ምራቅ      2. አይነ ምድር      3. ሽንት      4. የፔሪቶኒዩም ፈሳሽ  
5. የሳንባ ፈሳሽ      6. ትውከት      7. ህብሰሰረሰር ፈሳሽ      8. ደም

16-የትኛው መድሀኒት ለኤች አይ ቪ ከተጋለጡ በሃላ የሚወሰድ መድሐኒት/Post

Exposure Prophylaxis የያዘ ነው ብለው ያምናሉ

1. ለፀረ ኤች አይቪ ከሚሰጠው መድሃኒት ጋር ተመሳሳይ የሆነ  
2. ከፀረ ኤች አይቪ መድሃኒት ጋር አንድ አይነት የሆነ ግን ትንሽ ጠንክር ያለ  
3. ከፀረ ኤች አይቪ መድሃኒት ጋር ምንም የማይመሳሰል  
4. አላውቅም

17- ለኤች አይ ቪ ከተጋለጡ በሃላ የሚወሰድ መድሐኒት/Post Exposure Prophylaxis

ምን ያህል ኤችአይቪን ይከላከላል ብለው ያምናሉ

1. ሁሌም 99%      2. 75%      3. 50%      4. 30 % በታች

18-በስራ ገበታዎ ላይ በአጋጣሚ ለኤች አይ ቪ የመጋለጥ ሁኔታ ቢገጥሞት ለኤች

አይ ቪ መጋለጥ በሃይላ የሚወሰድ መድሃኒት/Post Exposure Prophylaxis/

ለመወሰድ ይፈልጋሉ

1. አዎ
2. አልፈልግም
3. እርግጠኛ አይደለሁም

19-ለጥያቄ ቁጥር 18 መልስዎ አዎ ከሆነ የኤች አይ ቪ መጋለጥ በሃይላ የሚወሰድ መድሃኒት/Post

Exposure Prophylaxis/ አገልግሎት የት ማግኘት ይፈልጋሉ

1. በምስራብ ሆስፒታል
2. ከምስራብ ሆስፒታል ውጪ
3. አገልግሎቱ ከሚሰጥበት የትኛውም ቦታ

20-ለጥያቄ ቁጥር 18 መልስዎ አልፈልግም ከሆነ ህክምናውን ለመወሰድ የማይፈልጉበት

ምክንያት ምንድን ነው

1. የኤች አይ ቪ መጋለጥ በሃይላ የሚወሰድ መድሃኒት /Post Exposure Prophylaxis/ አገልግሎት ከ ኤች አይ ቪ ኢንፌክሽን ይከላከላል የሚል እምነት የለኝም
2. የኤች አይ ቪ መጋለጥ በሃይላ የሚወሰድ መድሃኒት/ Post Exposure Prophylaxis /አገልግሎት ምን እንደሆነ ስለማላወቅ
3. ማግለል እና መድልዎ ይደርስብኛል ብዬ ስለምፈራ
4. በአገልግሎት ሰጪዎች ሚስጥር አያያዝ ስለማልተማመን
5. ሌላ ካለ ይገለጥ -----

21- ከሌች አይ ቪ መጋለጥ በሃይላ የሚወሰድ መድሃኒት / Post Exposure

Prophylaxis / ማን መስጠት/ ማዘዝ አለበት

1. ሀኪም
2. ነርስ
3. አዋለጅ ነርስ
4. የመድሃኒት ቤት ሰራተኛ
5. ሌላ

22-አሰራላጊ ሆኖ ስገኝ ለሌች አይ ቪ መጋለጥ በሃይላ ስለሚወሰድ መድሃኒት/Post

Exposure

Prophylaxis/ የስራ ባልደረባዎ እዲጠቀም ይገፋፋሉ

1. አዎ
2. አላረግም

23- በእርሶ አመለካከት ለሌች አይ ቪ መጋለጥ በሃይላ ስለሚወሰድ መድሃኒት/Post

Exposure

Prophylaxis/ ለጤና ባለሙያዎች ለማሳወቅ የትኛው መንገድ ተመራጭ ነው

1. ክሊኒክ ውስጥ
2. ሆስፒታል ውስጥ
3. በቡድን ወይይት
4. በበራሪ ጽሁፍ
5. በፖስተር
6. ሌላ-----

24- --ለሌች አይ ቪ ከተጋለጡ በሃላ የሚወሰድ መድሃኒት/Post Exposure

Prophylaxis ወስደዉ ያዉቃሉ

- 1-አዎ
2. አልወሰድኩም

25- ለጥያቄ ቁጥር 24 መልስዎ አዎ ከሆነ በምን አይነት ሁኔታ ነበር የተጋለጡት

- 1- የታካሚዉ የሰዉነት ፈሳሽ ፊት ላይ በመረጨቱ
- 2- ያገለገለ መርፌ ወግቶኝ
- 3- ያገለገለ ምላጭ ስለቆረጠኝ
- 4- ሌላ ካለ ይገለጥ-----

26- ለጥያቄ ቁጥር 24 መልስዎ አዎ ከሆነ መድሐኒቱን ጤና ባለሞያ ባዘዘው

መሰረት ጨርሰው ወስደውታል

-1-አዎ

2-አልጨረስኩትም

27--ለጥያቄ ቁጥር 24 መልስዎ አልወሰድኩም ከሆነ ያልወሰዱበት ምክንያት ምን ነበር

1. ታካሚው ኤች አይ ቪ ላይኖርበት ስለሚችል 2.በስራ ብዛት ጊዜ ስላልነበረኝ

3.የሚሰጥ ህክምና መኖሩን ባለማወቁ 4-ህክምናው የት እንደሚሰጥ ባለማወቁ

5. የመድሐኒቱን የጎንዮሽ ጠንቅ /side effects/ ስለፈራሁ

6. በገደኞቼ/በቤተሰብ6-ዘንድ መገለል ሊደርስብኝ ይችላል በሚል ስጋት

7. የመድሃኒቱን ፍቱንነት ስለማላምን

8- ምንም የሚያጋልጠኝ ሁኔታ ስላልገጠመኝ

28-ምድሃኒቱን እንዲወስዱ ያዘዘሎት ማን ነበር

1. የስራ ባልደረባዬ

2. ሀኪም

3.ነርስ

4. እራሴ

5-ወይስ ሌላ

29-ለኤችአይ ቪ መጋለጥ በሃይላ ለሚሰጥ መድሃኒት/Post Exposure Prophylaxis

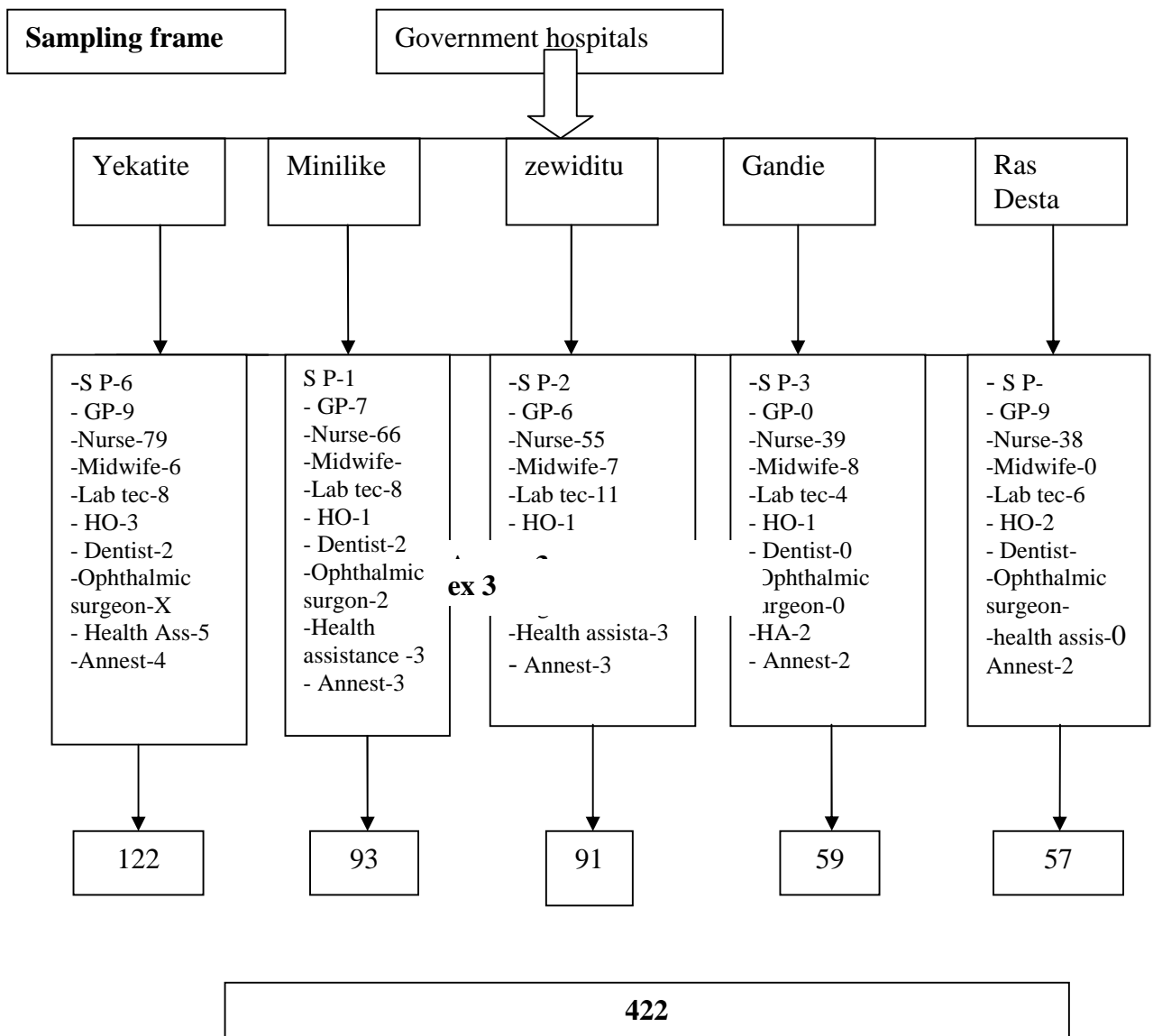
ከመውሰዱ በፊት በቂ የሆነ የምክር አገልግሎት አግኝተዋል

1. አዎ

2. አላገኘሁም



## Annex3



### Declaration

I, the undersigned declare that this thesis is my original work in partial fulfilment of the requirement for the degree of Master of Public Health. I also declare that it has never been presented in this or any other university and that all resources and materials used in the thesis have been duly acknowledged.

Student Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Place of submission: \_\_\_\_\_

Date of submission: \_\_\_\_\_

This thesis has been submitted with my approval as a university advisor.

Advisor Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date of submission: \_\_\_\_\_